ReMeS
Music that Speaks for Itself

An Honors Thesis
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Abstract

Here lies a written account of the trials and tribulations of Mark Lowe and the band Kemes as they strive for sonic perfection in the recording studio. Like a scalpel to the frog, here are the Kemes sessions dissected. Each band member and his instrument of choice is examined, explained, and deconstructed. The written portion that follows is provided as accompaniment to the demo album. It is intended to enhance the listener's experience and to inform him/her about the time and effort put behind the six track disc. The disc was made with idea that it would need no written assistance. So, stop reading... and Listen! to music that speaks for itself.
I call it "The Bends"... You know? That heavy feeling you get in your stomach when you hear those crunchy metal-driven guitars... the deep pounding bass... that hurts your chest... the assaulting double-kick drum... and the punishing vocal cries... 

Experience the sound of...

Witness the masses, sporting a chronic case of the Bends, clutching at their mid-section, sludging back and forth in unison...

Like a hemia in motion.

www.mp3.com/_remes
Remes is one of those bands you have to see live. They project such a raw energy with their music. Live really is the best way to experience it....but I was greedy. I wanted to capture the sound from the moment I heard it.

I was first introduced to Remes in the Spring of 2001. Eric Mason, the bass player, had been a good friend of mine since we had met freshman year in the TCOM department at Ball State University. He played a video of the band’s first show and I liked what I heard. In fact, I was into it so much I recorded the band live a month later in their practice home. The sound was okay, but I yearned for more.

With my senior year approaching, I jumped at the chance to get Remes in the studio for my thesis. The fall semester of 2001 began with me in the studio, just like I had planned. But that was about the only thing that went according to plan. Half-way through the semester I came to the conclusion that I was unhappy with the sound I had captured. Sure, it was decent, but I was looking for something more. I wanted the music to speak for itself. I wanted the band to be able to take a copy of this disc and feel confident that it represented the sound of the band.

So, with the forgiving grace of my advisor, Stan Sollars, I took an incomplete and delayed my graduation to spend more time in the studio with Remes. It was a tough decision to make, but one that I never regret. This project is a personal triumph for me, an overcoming of adversity. I knew deep down inside that I could capture the sound I wanted, and I also knew deep down that Remes had the sound I wanted. I just had to remain focused and poised.

Now, I would like to share with you the path I took to capture this sound I was looking for. What follows is a look back on the weeks spent in the studio with Remes. I will share with you some of the trials and errors along the way, along with some tips, tricks, and possibly some unorthodox maneuvers in the studio. But, hey, that’s what this project was all about, me experimenting in an actual studio session, gaining the experience by making the mistakes. And gaining even more experience by correcting those mistakes.
The backbone of the Remes sound was inserted on the first day of recording with the drums. Here, the foundation would be laid down for all of the songs. The structure, the rhythm, the tempo of all future recording would have to obey the signature of the drums. Needless to say, this initial phase of recording was a crucial one.

First, the drums were all miked for recording and levels were tested. The drums were recorded and mixed live to two channels. Therefore, it was important to capture all of the sound then and there. The main emphasis of Mike’s drumming lies in the snare and kick drums. Much of my time was spent working with the sound of the kick drum. We played with microphone positioning and equalizing the sound to get the best response we could. In the end we used Mike’s idea of blanketing the kick drum to create a vacuum to isolate the sound even more.

Mike also did me a favor by stripping down his drum set. He set-up only the pieces he needed for recording and left all of the extras at home. This helped a lot, as there were no extra obstacles to place microphones around. This also helped when miking the cymbals. With only two microphones overhead, I had to be very selective about which cymbals would receive the most attention.
My attention was not only on Mike, however. The guitarists, Jerod and Eric, were accompanying the drums. The guitars were recorded direct to not interfere with the drums so they did not need to be miked. They merely served as a guide for the songs and to help Mike cue his drums. The scratch guitar tracks were recorded on tracks 7 and 8 of the 8-channel ADAT, which would later be recorded over by the vocals. With all sound elements in place and checked, it was finally time to lay some tape!

As I stated earlier, every take was extremely important. Every track laid down would have to adhere to the sound of the drums. The advantage I had was that Mike is a talented drummer, and very serious about his sound. The disadvantage was, like any good musician, he is his own worst critic. Many takes that appeared fine to me, Mike just wasn't happy with. His attention was very much on the details of his playing. A late cymbal here or a missed drum there would be enough for Mike to say “do-over.”

Communication is really important in instances such as this. For the sake of the recording, it was my job to ensure Mike that a muffed cymbal crash would not ruin a solid drumming session, especially when the full mix is put together. In fact, on “Disconnect,” Mike actually hit his drumsticks together twice (and you can hear it in the recording!). However, the double-bass kicks at the end of the song were so intense and the entire set was so on the money that I just had to keep it as a take! (You can hear the actual vocal afterglow of Mike on the following track as he screams “Who’s my bitch?!?”)

Compromise is a big factor in these situations. You have to know what is important to the artist as well as what is good for the sound. It was important for me to do justice to the intensity that Mike brings to the drums and capture all of the energy that goes into his playing. The intensity captured in the drum sessions can’t always be replicated. Rather than risk losing the intensity of the session for a few drum “ticks,” I opted to keep the take I had. It is decisions such as this that can’t be taught in a classroom. In the music field experience rules, and the experience is what I was after.
--------Phase II--------

Jerod------------------

--------Lead Guitar--------

A sigh of relief (maybe more like a howl) was given out after the drums were finished. That was the most crucial part of the recording sessions. Plus, the drums were exited out of the studio following recording, so we had a much easier time setting up and tearing down. From here on out, the artists would be flying solo in the studio. Isolating the instruments instead of live recording would prove to be a good choice on my part. It offered me more flexibility and control over the sound in the end.

This was no more apparent than in the recording of the guitars. When playing live, Jerod uses a half-stack amplifier, consisting of four, 12-inch speakers. However, since we were isolating his sound in the studio, we recorded with a Studio Pro 112 amp with just one 12-inch speaker. The logic behind this decision was not difficult. It is simply much easier to mike one speaker rather than four.

A simple Shure SM57 mike was utilized to capture Jerod’s sound. The signal was recorded wet with all effects running through Jerod’s floor processor and into the amp.

“Crunch” was the word of the day. The Remes sound is very heavy, so the guitars needed that presence to incite the masses to thrash about like wild animals. The crunch was found mostly by dropping out the mid-range frequencies with the EQ and boosting the highs and lows.

However, we recorded the guitars on two channels (3 & 4) to reinforce the sound. The first track served as the base sound for the guitar. The second track was used to strengthen the chorus parts and to overlay melodies on the first track. Most of the “crunch” EQ was applied to the second track to beef-up the sound. The first track was kept full to give the guitars presence.
My sound guide through most of the recording process was Eric Mason, the bass guitarist for Remes. Eric writes a majority of the music for Remes and knows what type of sound he wants for the band. Most of the time in the studio Eric was in the control room, critiquing my recording decisions. He was a great help through much of the process, but this time he was on the other side of the glass.

Yes, it was time to record the bass, the backbone of the guitars. Eric is a good musician, so most of the songs he pulled off in one or two takes. The challenge with the bass guitar did not lie in the actual recording. Microphone choice was my main concern.

Obviously, Eric is very concerned with the sound of his bass guitar. So we played for a while with different microphones and microphone placements to achieve the proper sound. The obvious microphone for the job was the Sennheiser MD421, specifically designed for better bass response. However, I was not happy with the sound I was getting out of the mike, so I played for a bit with other choices.

In the end, I give all credit for the microphone choice to Tyler Watkins. Tyler is a friend of mine who had just graduated from Full Sail and just happened to stop by that day to see how things were going. He asked me what mike I used to record the kick drum. I showed him the Beyer kick drum microphone and he suggested that I record the bass guitar with the same mike as the bass drum. So I did....

And wouldn't you know it, I finally got the sound I wanted. However, that was only half the sound. Like the lead guitar, we recorded the bass on two channels (3 & 6).
The first channel was miked to get the string dynamics, such as bass slaps and pulls. The second channel was ran direct to capture the smooth tones of the bass. Originally I had planned to use the miked channel for the majority of the bass sound. The direct channel was to be heavily compressed and strictly low-end sound (all the high frequencies cut out). However, in the end it was the direct channel, with a smoother tone and less string noise that was favored over the miked channel.

Microphone choice was the biggest obstacle of the bass. With a little help from the scratch tracks recorded on the first day, Eric nailed nearly all of his takes instantly. The only thing left to mike now was the sound of Ande's mouth...
I took advantage of Eric's bass skills and decided that since we finished the bass recording so soon, we could record some vocals on the same day to save time. So, I got Ande into the studio to record the vocal melodies. Basically, Ande has two types of vocals; verses (usually more melodic) and choruses (consisting mainly of screaming). Like all the other instruments, I dedicated two channels to the vocals, one for the verses, one for the chorus.

First we concentrated on the melodies. These were not very difficult to record. Stan Sollars had made available the best of microphones for vocal recording (Shure KSM32) that can capture any sound. Plus, all effects were going to be added in post, so I could record the raw sound now and add effects later. However, we did toy with some effects to get a grasp on the sound for later mixing.

Ande has come a long way as a singer in the year that the band has been together. This was a huge help in the studio. His voice is much stronger and has a much better range than it used to. So there was not much challenge to recording the melodies. It was merely a time-based decision on my part, to ensure we could get everything recorded within the allotted time. Plus, with the melodies out of the way we could concentrate on the screams later without having to worry about Ande losing his voice.
As you can probably tell on the album, the screams are very harsh and take a lot out of Ande’s voice. Recording on two separate days allowed me to capture the better part of his voice before it ran dry from screaming too much. The screams were a huge challenge for me. In previous recordings we could never get the screams to sound raw enough. First off, we did exactly what was probably against the advice of a textbook; we ditched the good microphone. Ande brought in his stage vocal microphone, which is very beat-up and rough, but it had the sound he wanted and was what he was used to. I wanted him to feel comfortable and confident in the studio.

To add the harsh edge to the screams, we recorded Ande’s voice from the stage microphone through a live monitor. By distorting the sound on the speaker, we could catch all of the harsh sound without distorting the recording tape. Since we were recording on ADAT, there was no leeway with distortion as there is with analog recording. Any peaks on the ADAT would register as digital distortion and be entirely unusable. The raw sound is all I was concerned with on the vocals. Many effects would be added and much tweaking would be done later during mix-down.
With all recording finished, it was time for me to step up to the plate and deliver (with some help from the band of course). The weeks following recording were spent in the control room, fine-tuning the Remes sound. The first assignment in the mix-down process was effects processing. Studio E has a variety of effects processors, and I wasn't about to leave any sitting empty.

Compression was my first consideration. All music and vocals on the album have some form of compression applied to them. The compression would squeeze the sound, so the elements could be mixed at a higher amplitude without taking up too much room. For the drums I used the Aphex compressors because they allow greater control over the parameters. I used the Aphex unit to add a quick attack and slow release times, which are the most important for the drums. For the main guitars channels, I used the DBX compressors. They are very standard compressors with many features, but very easy to use. The vocals and the remaining guitar tracks were compressed using the 4-channel automatic compressor. Because it is automatic, you only have control over “drive” and “output” parameters, but it is better than nothing.

Following compression, effects were added, but only to the vocals. Remember, all of Jerod’s guitar effects were recorded live and Eric doesn’t use any effects on his bass. So for the majority of the effects processing, it was Ande and I in the studio scrolling through different effects on the Digitech S200 and the Lexicon MFX200. Once again, the effect choices come back to the distinction between verses (melodic) and choruses (screams).

Ironically, during the verses, we added chorus effects to strengthen Ande’s voice. We also applied a reverb effect to make him sound very distant. On the first track, “It,” we also used a little echo that you can probably hear just before the screams come in. Processing the screams was a bit easier. Since there was so much distortion already to the sound, we simply added a little detune effect to give it a different quality and left it at that. However, before the effect was added to the screams, the channel was first ran through a graphic equalizer to take away some of the high frequencies which were painful. Then the sound passed through the compressor on its way to the effects processor.
So, during mix-down I learned one very valuable thing: vocals are a pain. The instrumental tracks on the album were so much easier to mix. Just adding one more element to the equation can add hours and hours to your studio time. Here is where most of my learning experience came, however. Every time I went back into the studio my mixes would get better and better.

It took three or four times in the studio before we finally got the right sound for the guitars. Part of this was due to the order in which we mixed the songs. Since we recorded "Lead Me" first, we usually began with that song. But, this song was a newly written song for Remes, so mixing the guitar sound according to it was a bit misleading. The band was still unfamiliar with the sound they wanted. One day we began with "Disconnect" (the first Remes song) and we finally nailed that "crunchy" guitar sound we wanted. In retrospect, it was an obvious decision. As I have heard others put it before, "Start with what you know."

The sound of the bass took even longer than the guitar! Again, "Disconnect" was our main concern here. Even though the bass part on the song was the least involved, we knew if we could find the sound on "Disconnect" we could nail the other tracks. The drums were pretty much set in stone since they were mixed live to two channels. All total, it took about a month of rehashing and fine-tuning the Remes sound in the studio before I was finally happy with the outcome.
And just when I thought I was finished... my parents bought me a new laptop computer. I just had to jump at the chance of mixing the sound in the digital domain. Ande loaned me a copy of some digital editing software and we were on our way! Using the sound we had spent so much time trying to find in the studio, I burnt a CD copy of the individual tracks in the mix. With each element isolated onto its own track, I simply imported the sounds into the digital editing program, and the fine-tuning began all over again.

The majority of the sound was already there, but the digital editing was a great clean-up tool. Most of the applications on the computer were used to boost the sound and take any flaws out of it. The limiter function was used on many sounds to boost the levels without them peaking out. Plus I cut out all extraneous noise such as amplifier hiss and vocal breaths. These are very minute details, but every bit helps to fine-tune the sound. Much of the work on the computer probably isn’t even noticeable in the full mix, but I wasn’t taking any chances. I will tell you that the digital editing definitely gave the sound much more presence and clarity. Finally, I had the quality of sound I was looking for all along.
So, now I sit finishing this written portion with a smile on my face. All of the effort I have put into this project is finally paying off. I feel confident that I proved to my parents, my advisor, to the band, and to myself that I could do this project better. I feel confident in the sound I captured on tape. Most importantly, I feel confident that Remes can take this disc and shop it to anyone.

And that is the bottom line. This is a demo, a demonstration of what this band can really do. To see how far Remes has come in a year's time is unbelievable. Yeah, sure, live is the best only way to get the raw energy. But the final outcome of these recording session definitely captures a little bit of that magic.

In closing I would like to say to anyone that is preparing for a project of this sort—stay focused! Focus was my main consideration during the recording sessions. I took things one element at a time, the same way I organized this paper. You have to break it down little by little to get at the big picture. By doing this, I made sure not to get overwhelmed by the sheer magnitude of everything.

All in all I am happy with the outcome of this project. I gained all I could ever want and more in terms of studio experience. Plus, I was able to provide Remes with a marketable recording. And in the end, I can finish my college career with my head held high.
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Many thanks to Remes (Ande, Jerod, Eric, and Mike) for giving me their time and talent. And just for kicking ass!

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Extra Thanks
To all fans and supporters of Remes!

-----------------References-----------------

My biggest references throughout this process were my ears!
The majority of this composition was completed using my own expertise as well as the musician's in the band and, of course, Stan Sollars.

The only written documents used as reference materials during recording are as follows:
